	Application No.	Applicant(s)
Notice of Allowability	10/040,690	EBNER, FRITZ F.
	Examiner	**Art Unit**	
	Charlotte M. Baker	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Application filed on 01/07/2002*.

2. ☒ The allowed claim(s) is/are *1-28*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____ .

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DETAILED ACTION

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

Mr. Mark Svat (34,261) on November 17, 2005.

2.   The applications has been amended as follows:

In claim 1, step g), insert period at the end of the sentence.

In claim 3, insert period at the end of the claim.

In claim 4, replace "comprising" with --comprising:--.

In claim 5, replace "comprising" with --comprising:--.

In claim 6, step, q), insert period at the end of the sentence.

In claim 7, step, g), insert period at the end of the sentence.

In claim 11, insert period at the end of the claim.

In claim 12, insert period at the end of the claim.

In claim 13, insert period at the end of the claim.

In claim 14, replace "comprising." with --comprising:--.

In claim 14, step, q), insert period at the end of the sentence.

In claim 15, insert period at the end of the claim.

In claim 16, insert period at the end of the claim.

In claim 17, insert period at the end of the claim.

In claim 19, replace "comprising." with --comprising:--.

In claim 21, insert period at the end of the claim.

In claim 22, insert period at the end of the claim.

In claim 23, insert period at the end of the claim.

In claim 24, replace "comprising." with --comprising:--.

In claim 24, step, q), insert period at the end of the sentence.

In claim 25, insert period at the end of the claim.

In claim 26, insert period at the end of the claim.

In claim 27, insert period at the end of the claim.

In the Abstract,

Replace "frame buffer is provided" with --frame buffer is provided.--.

Replace "include black rendering hints" with --include black rendering hints.--.

Replace "predetermined thresholds" with --predetermined thresholds.--.

Replace "surrounding the black pixel are black" with --surrounding the black pixel are black.--.

Replace "under print" with --under print.--.

Replace "under print value" with --under print value.--.

In the Specification,

In par. 2, replace "printed image qualities" with --printed image qualities.--.

In par. 3, replace "lighter colored background" with --lighter colored background.--.

In par. 3, replace "under the black object" with --under the black object.--.

In par. 3, insert a period at the end.

In par. 4, replace "making text difficult to read" with --making text difficult to read.--.

In par. 5, replace "cost control" with --cost control.--.

In par. 5, replace "choking techniques" with --choking techniques.--.

In par. 5, replace "background is choked" with --background is choked.--.

In par. 5, replace "misregistration problems" with --misregistration problems.--.

In par. 5, insert a period at the end.

In par. 6, insert a period at the end.

In par. 7, insert a period at the end.

In par. 8, replace "frame buffer is provided" with --frame buffer is provided.--.

In par. 10, insert a period at the end.

In par. 11, replace "," with --;--.

In par. 15, replace "," with --;--.

In par. 16, replace "," with --;--.

In par. 20, insert a period at the end.

In par. 22, replace "2A)" with --2A).--.

In par. 22, replace "thereon" with --thereon.--.

In par. 22, insert a period at the end.

In par. 23, insert a period at the end.

In par. 24, replace "1A" with --1A.--.

In par. 24, replace "thereon" with --thereon.--.

In par. 24, replace "area Fig. 2" with --area. Fig. 2--.

In par. 24, insert a period at the end.

In par. 25, replace "hints is provided" with --hints is provided.--.

In par. 25, replace "black rendering hints" with --black rendering hints.--.

In par. 25, replace "CIE" with --CIE.--.

In par. 25, insert a period at the end.

In par. 26, replace "thresholds)" with --thresholds.--.

In par. 26, replace "310" with --310.--.

In par. 26, replace "314" with --314.--.

In par. 27, replace "3 is provided" with --3 is provided.--.

In par. 27, replace "context pixels" with --context pixels.--.

In par. 27, replace "24" with --24.--.

In par. 28, replace "thresholds)" with --thresholds).--.

In par. 28, replace "410" with --410.--.

In par. 28, insert a period at the end.

In par. 30, insert a period at the end.

In par. 32, replace "FIG 3 is provided" with --FIG 3 is provided.--.

In par. 32, replace "618" with --618.--.

In par. 33, insert a period at the end.

In par. 34, replace "color spaces" with --color spaces.--.

In par. 34, replace "K channel" with --K channel.--.

In par. 34, insert a period at the end.

In par. 35, replace "710" with --710.--.

In par. 35, replace "712" with --712.--.

In par. 36, replace "FIG 7 is provided" with --FIG 7 is provided.--.

In par. 37, replace "810" with --810.--.

In par. 37, replace "812" with --812.--.

In par. 37, replace "(816)" with --(816).--.

In par. 38, replace "FIG 7 is provided" with --FIG 7 is provided.--.

In par. 39, replace "FIG 7 is provided" with --FIG 7 is provided.--.

In par. 39, replace "FIG 8" with --FIG 8.--.

In par. 40, replace "embodiments" with --embodiments.--.

In par. 40, replace "description" with --description.--.

Allowable Subject Matter

3.   Claims 1-28 are allowed.

4.   The following is an examiner's statement of reasons for allowance: claims 1-12 are

allowed over the prior art of record because the Examiner found neither prior art cited in its

entirety, nor based on the prior art, found any motivation to combine any of said prior art which

teaches

5.   a) receiving the pixel data and the black rendering hints from the frame buffer,

        b) converting the pixel data from the frame buffer to device color space (e g C,M,Y,K)

data,

        c) retrieving the C,M,Y,K data and an associated black rendering hint for a

first pixel;

     d) determining if the black rendering hint for the first pixel is true,

     e) if the black rendering hint is true, performing a black trapping algorithm

using a plurality of pixels forming a context window associated with the first pixel

and subsequently rendering the first pixel according to an under print system, otherwise,

subsequently rendering the first pixel according to a default rendering system.

     f) determining if additional pixel data from the frame buffer is to be processed

in accordance with steps c) through e); and,

     g) if additional pixel data is to be processed. repeating steps c) through e) for a

next pixel, otherwise, ending the process.

6.   Dermer et al. (5,313,570) disclose a method and apparatus for processing digital data

representing a structured graphic image to compensate for the printing plate misregistration.

Dermer et al. fail to specifically address the invention as claimed.

7.   Ahlstrom et al. (6,594,030) disclose automatically calculating minimal traps for each

page object prior to conversion to a page description language. Ahlstrom et al. fail to

specifically address the invention as claimed.

8.   Kritayakirana et al. (6,798,540) disclose methods of trapping to prevent polychromatic

printing artifacts. Kritayakirana et al. fail to specifically address the invention as claimed.

9.   a) receiving the pixel data from the frame buffer,

     b) converting the pixel data from the frame buffer to C,M,Y,K pixel data,

     c) retrieving one or more components of pixel data from the group consisting

of pixel data from the frame buffer and C,M,Y,K pixel data for a first pixel,

d) determining if the first pixel is black with respect to predetermined thresholds for one or more components of the pixel data retrieved;

e) if the first pixel is black, performing a black trapping algorithm using a plurality of pixels forming a context window associated with the first pixel and subsequently rendering the first pixel according to an under print system, otherwise, subsequently rendering the first pixel according to a default rendering system,

f) determining if additional pixel data from the frame buffer is to be processed in accordance with steps c) through e); and,

g) if additional pixel data is to be processed, repeating steps c) through e) for a next pixel, otherwise, ending the process.

10.   Dermer et al. (5,313,570) disclose a method and apparatus for processing digital data representing a structured graphic image to compensate for the printing plate misregistration. Dermer et al. fail to specifically address the invention as claimed.

11.   Ahlstrom et al. (6,594,030) disclose automatically calculating minimal traps for each page object prior to conversion to a page description language. Ahlstrom et al. fail to specifically address the invention as claimed.

12.   Kritayakirana et al. (6,798,540) disclose methods of trapping to prevent polychromatic printing artifacts. Kritayakirana et al. fail to specifically address the invention as claimed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charlotte M. Baker whose telephone number is 571-272-7459. The examiner can normally be reached on Monday-Friday 8:30-5:00.
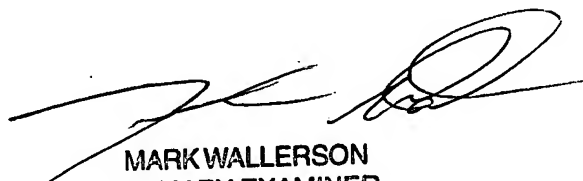
If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kimberly A. Williams can be reached on 571-272-7471. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CMB

MARK WALLERSON
PRIMARY EXAMINER